



### South flank of Brokeoff Volcano

View to the south from the summit of Brokeoff Mountain (Lassen Peak quadrangle). The south flank of Brokeoff Mountain is covered mostly by lava flows of the regional basaltic andesite of Huckleberry Lake (unit mhl, 300 ka) that is younger than the Brokeoff Volcano. The vent for the basaltic andesite of Huckleberry Lake is in the area of the cliff in deep shadow in the left of the photograph. Basaltic andesite of Huckleberry Lake overlies dacite of Twin Meadows (unit dtm,  $470 \pm 10$  ka, the uppermost unit of the Mill Canyon sequence) and several andesite units of the Diller sequence, including the andesite of Glassburner Meadows (unit ag,  $\sim 450$  ka). The forested area at the left bottom of the photograph is floored by the  $3,310 \pm 55$  yr B.P. landslide (unit Qsh) that originated at the large scarp below Brokeoff Mountain and flowed for at least 7 km down Mill Canyon. The dacite of Morgan Mountain (unit dmm), the dacite of Christie Hill (unit dch), and the dacite of Plantation Gulch (unit dpq), prominent in the upper center of the photograph, are partially buried by lavas from Brokeoff Volcano. These 3 domes are part of the Rockland caldera complex and at  $\sim 800$ – $825$  ka are probably the oldest preserved units of the Lassen Volcanic Center. The dissected area between Childs Meadows and Battle Creek Meadows forms the east flank of the Maidu Volcanic Center and is mostly beyond the map area (Sheet 1). The Mill Creek Plateau (unit rmp,  $\sim 1,200$ – $1,300$  ka) is one of several large and thick rhyolite lava flows that flank the Maidu Volcanic Center. Doe Mountain (andesite of Doe Mountain, unit adm) and andesites of Wild Cattle Mountain (unit Taw) are part of the Dittmar Volcanic Center and are probably about 2,500 ka. The Yana Volcanic Center (2,400–3,400 ka) and Butt Mountain form most of the skyline well beyond the map area (Sheet 1). Deer Creek flows between the Maidu and Yana Volcanic Centers. The northern Sierra Nevada are partially visible beyond the Yana Volcanic Center.

*Photograph by Michael A. Clynne.*